

Technology in Rural Transportation

A recent study documented more than eighty proven, cost-effective, “low-tech” solutions to rural transportation needs, most developed or implemented by local transportation professionals. One of these solutions is outlined below:



Learn all about the simple solutions on the Internet at <http://inform.enterprise.prog.org>

The simple solutions report is available from Hau To at (503) 892-2533, or email: to@crc-corp.com

Using Recycled Tires to Stabilize Slopes

Overall goal:

To find a creative use for discarded tires.

Technical approach:

Winter rains and other environmental causes can lead to slippage of mountain slopes and consequent closures of critical roads. An anchor wall made of old tires may be constructed by cutting the tires in half along the tread, placing them in the soil fill and anchoring them together with polypropylene rope. Whole tires are then placed along the fill face for erosion protection.

Current status:

The protected slope and road have not experienced any damage due to subsequent winter storms.

Location / geographic scope:

Laguna Peak Road in Santa Barbara County, California.

Agencies involved:

Santa Barbara County Public Works, United States Navy.

Cost information:

Total cost of the project was \$50,000, \$10,000 for design and \$40,000 for construction. This is approximately 1/3 the cost of traditional methods such as installing cribwall, gravity or a single retaining wall.

Key contacts:

Bill Tracy, Public Works Engineer, 805.568.3305.

Have goals been achieved?

Yes. Tires may not be dumped in California landfills, so the Public Works Department looks for new ways to recycle.

Solution timeline:

Problems with the mountain slope first arose in the winter of 1994-1997. The tire wall was first tested in January 1997.

